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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,003	01/18/2002	Patrick C. Marks	9319	7774

7590 10/17/2002  
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EXAMINER

NGUYEN, TU MINH

ART UNIT	PAPER NUMBER
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3748

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DATE MAILED: 10/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/051,003

Applicant(s)

Marks et al.

Examiner

Tu M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 20, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7, 9, and 11 is/are rejected.
- 7) ☒ Claim(s) 2, 4, 6, 8, 10, and 12 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jan 18, 2002 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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### **DETAILED ACTION**

1. An Applicant's Amendment filed on September 20, 2002 has been entered.

Claims 1 and 5 have been amended; and claims 9-12 have been added. Overall, claims 1-12 are pending in this application.

#### ***Claim Objections***

2. Claim 9 is objected to because
  - On line 6 of the claim, --and-- should be inserted following "connection;"
  - On line 9 of the claim, "and" should be deleted.
  - On line 10 of the claim, --wherein-- should be inserted preceding "said".

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 3, 5, 7, 9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakachi et al. (Japan Publication 2-215925).

Re claim 1, as shown in Figure 1, in a system having a multi-speed engine with an air inlet line (5) connected to the engine, Nakachi et al. disclose a Helmholtz resonator structure comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a restricted connection (12); and

- means (valve (15)) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine.

Re claims 5 and 9, as shown in Figure 1, Nakachi et al. disclose a system having a multi-speed engine with an inlet line (5) connected to the engine, microprocessor means (16) for controlling the speed of the engine, the improvement comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a restricted connection (12); and

- means (valve (15)) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine;

wherein means for changing the frequency includes a valve (15) having only an open and a closed position.

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With regard to the preamble directed to “a refrigeration system”, a preamble to a claim is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. See *Kropa v. Robie*, *supra* at 480. See also *Ex parte Mott*, 190 USPQ 311, 313 (PTO Bd. of App. 1975). Clearly, the pending claims 5 and 9 do not rely on the preamble for completeness.

Re claims 3, 7, and 11, in the Helmholtz resonator of Nakachi et al., the means for changing the frequency response includes at least one restricted connection (12) which is selectively connected between the chamber and the inlet line.

#### ***Allowable Subject Matter***

5. Claims 2, 4, 6, 8, 10, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments with respect to the references applied in the previous Office Action have been considered but are moot in view of the new ground(s) of rejection.

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*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

*Prior Art*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of three patents: Kanamaru (Japan Publication 58-124057), Fukami et al. (Japan Publication 60-22021), and Oota (Japan Publication 60-95133), each discloses a Helmholtz resonator and a means to change the frequency response of the resonator by adjusting the resonator's volume in response to the changes in engine speed.

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*Communication*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (703) 308-2833.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (703) 308-2623. The fax phone number for this group is (703) 308-7763.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

TMN

October 14, 2002

*Tu M. Nguyen*

Tu M. Nguyen

Patent Examiner

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*Thomas Denion*

THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
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